CLAIMS

What is Claimed Is:

1. A interconnect for a flexure arm of a hard disk drive comprising:

a flexure arm coupled to an actuator arm pivotally mounted to a base plate via a bearing assembly;

a head slider gimbal mounted to the flexure arm;

a voice coil motor comprising a voice coil coupled to a magnet assembly;

an inner pair of conductive traces disposed along the flexure arm, the inner pair of traces conveying electrical current from the voice coil to the head slider; and

an outer pair of conductive traces disposed along the flexure arm, the outer pair of traces conveying electrical current from the voice coil to the head slider.

2. The interconnect of Claim 1 wherein the inner pair of conductive traces and outer pair of conductive traces are symmetrical about a center axis of the flexure arm.

3. The interconnect of Claim 2 wherein the inner pair of conductive traces comprise a pair of write traces for conveying current when data is written and the outer pair of conductive traces comprise a pair of read traces for conveying current when data is read.

4. The interconnect of Claim 3 further comprising:

a stainless steel lamina extending the length of the flexure arm; and

a window etched in the stainless steel lamina adjacent to the pair of write traces to provide high impedance of the write traces.

5. The interconnect of Claim 4 wherein the window etched in the stainless steel lamina is symmetrical about the center axis of the flexure arm.

6. The interconnect of Claim 2 wherein the inner pair of conductive traces comprise a pair of read traces for conveying current when data is read and the outer pair of conductive traces comprise a pair of write traces for conveying current when data is written.

7. The interconnect of Claim 6 further comprising:

a stainless steel lamina extending the length of the flexure arm; and

a window etched in the stainless steel lamina adjacent to each write trace of the pair of write traces such that a pair of windows are etched in the stainless steel lamina, the window etched in the stainless steel lamina to provide high impedance of the write traces.

8. The interconnect of Claim 7 wherein the pair of windows etched in the stainless steel lamina are symmetrical about the center axis of the flexure arm.

9. A symmetric interconnect for a flexure arm of a hard disk drive comprising:

a flexure arm coupled to an actuator arm pivotally mounted to a base plate via a bearing assembly;

a head slider gimbal mounted to the flexure arm;

a voice coil motor comprising a voice coil coupled to a magnet assembly;

an inner pair of conductive traces coupled to the voice coil motor and to the head slider for conveying electrical current between the voice coil and head slider, the inner pair of traces extending the length of the flexure arm and symmetrical about a center axis thereof; and

an outer pair of conductive traces coupled to the voice coil motor and to the head slider for conveying electrical current between the voice coil and head slider, a trace of the outer pair of conductive traces extending the length of the flexure arm adjacent to a like electrical polarity trace of the inner pair of traces and a remaining trace of the outer pair of conductive traces extending the length of the flexure arm adjacent to a like electrical polarity trace of the inner pair of traces, such that the outer pair of traces are symmetrical about the center axis of the flexure arm.

10. The interconnect of Claim 9 wherein each trace of the outer pair of conductive traces extends adjacent a like trace of the inner pair of traces and is interposed between a side of the flexure arm and the like trace of the inner pair of traces.

11. The interconnect of Claim 9 wherein the inner pair of conductive traces comprise a pair of write traces for conveying current when data is written and the outer pair of conductive traces comprise a pair of read traces for conveying current when data is read.

12. The interconnect of Claim 11 further comprising:

a stainless steel lamina extending the length of the flexure arm; and

a window etched in the stainless steel lamina adjacent to the pair of write traces to provide high impedance of the write traces.

13. The interconnect of Claim 12 wherein the window etched in the stainless steel lamina is symmetrical about the center axis of the flexure arm.

14. The interconnect of Claim 9 wherein the inner pair of conductive traces comprise a pair of read traces for conveying current when data is read and the outer pair of conductive traces comprise a pair of write traces for conveying current when data is written.

15. The interconnect of Claim 14 further comprising:

a stainless steel lamina extending the length of the flexure arm; and

a window etched in the stainless steel lamina adjacent to each write trace of the pair of write traces such that a pair of windows are etched in the stainless steel lamina, the window etched in the stainless steel lamina to provide high impedance of the write traces.

16. The interconnect of Claim 15 wherein the pair of windows etched in the stainless steel lamina are symmetrical about the center axis of the flexure arm.

17. A flexure arm assembly comprising:

a flexure arm having a center axis;

a first pair of conductive traces disposed along the center axis with one trace of each pair on opposite sides of the center axis; and

a second pair of conductive traces disposed along the center axis with one trace of each pair on opposite sides of the center axis.

18. The flexure assembly of Claim 17 wherein each trace of the first pair of traces are positioned symmetrically on opposite sides of the center axis.

19. The flexure assembly of Claim 18 wherein each trace of the second pair of traces are positioned symmetrically on opposite sides of the center axis.

20. The flexure assembly of Claim 17 further comprising a window etched symmetrically about the center axis of the flexure arm.